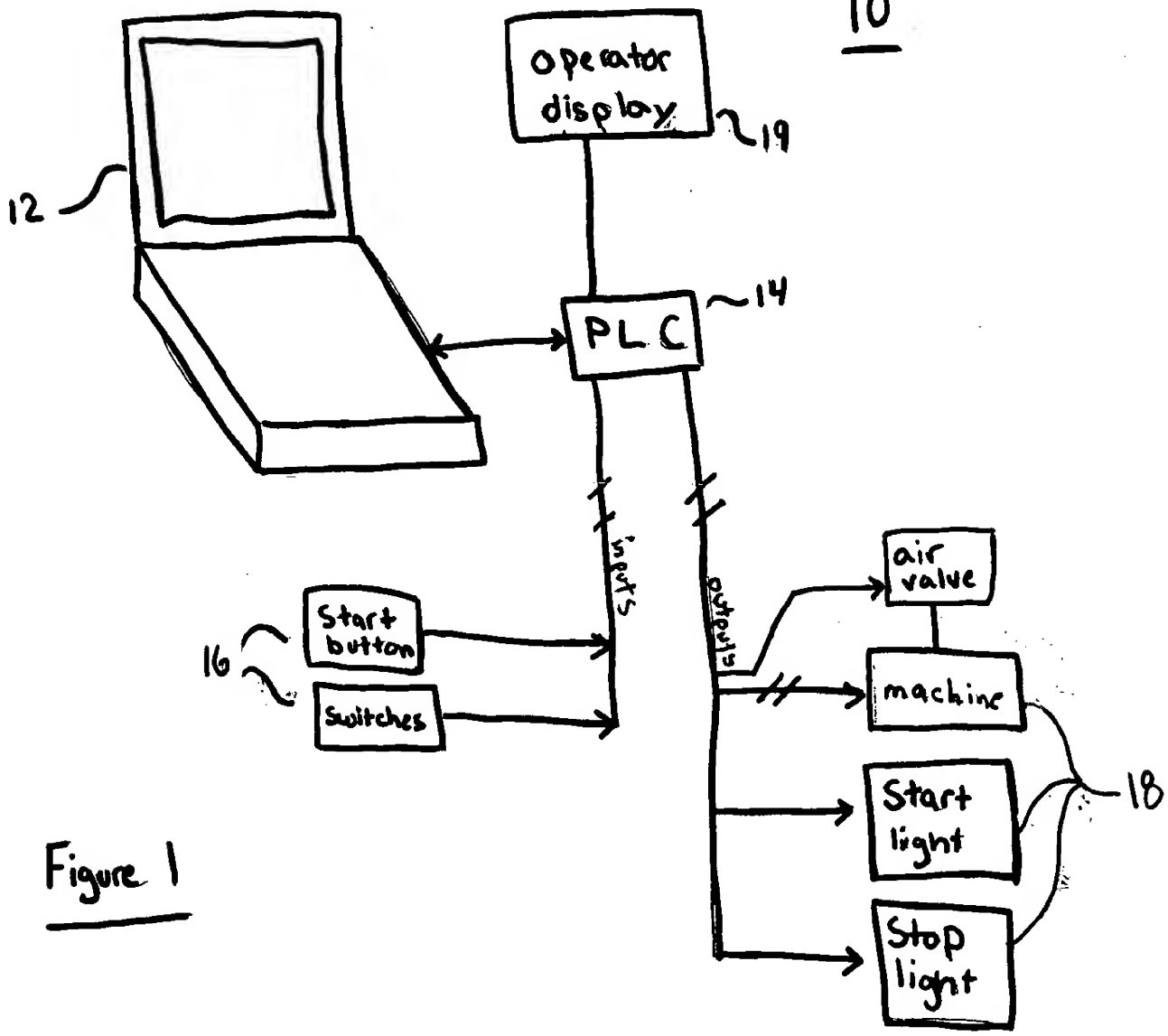

10
operator display
19
12
PLC
14
inputs
outputs
air valve
Start button
16
Switches
machine
Start light
18
Stop light

Figure 1

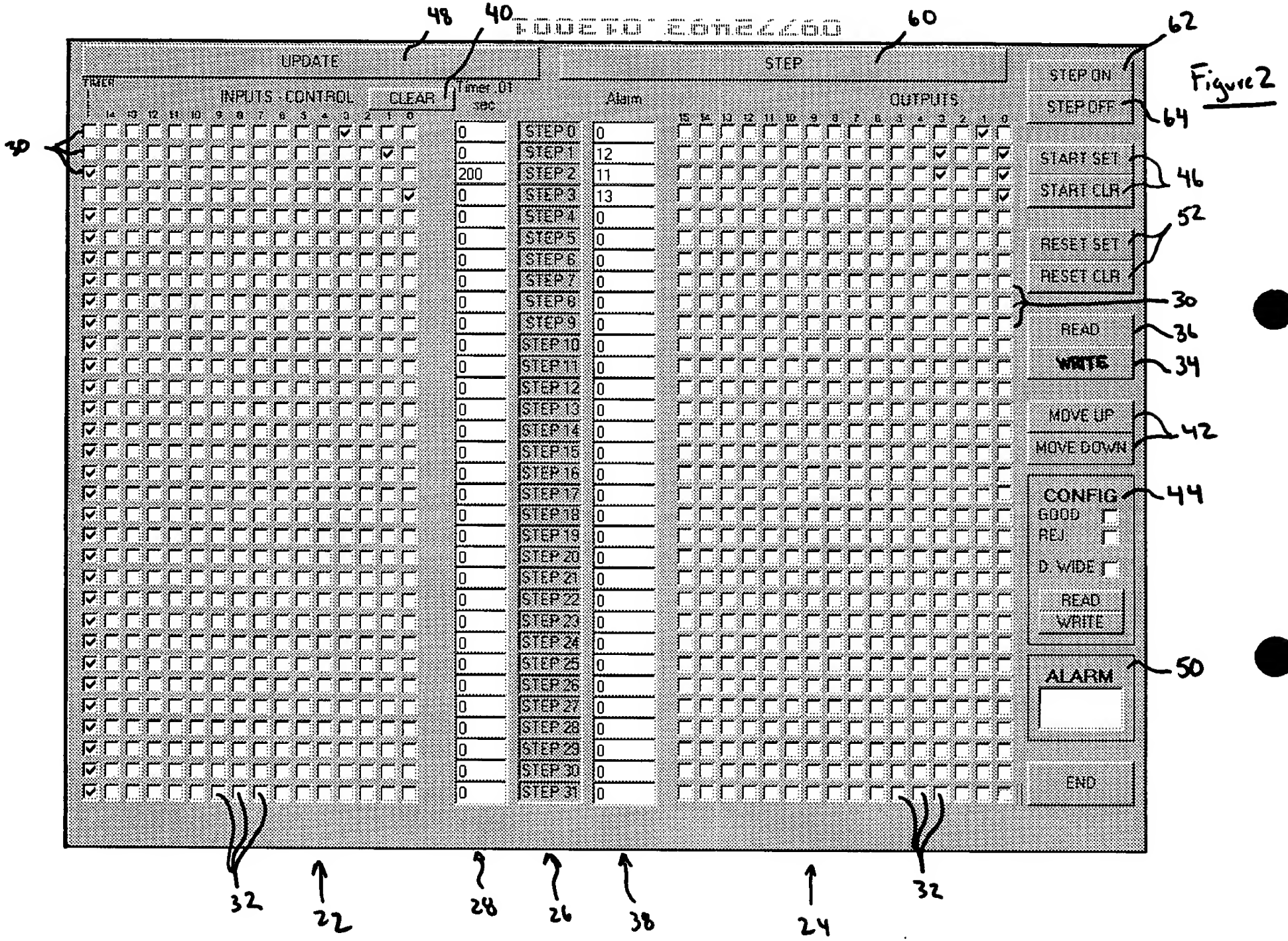

48
40
60
62
UPDATE
STEP
STEP ON
STEP OFF
64
Figure 2
TIMER
INPUTS - CONTROL
CLEAR
Timer, 01 sec
Alarm
OUTPUTS
START SET
START CLR
46
RESET SET
RESET CLR
52
30
READ
36
WRITE
34
MOVE UP
MOVE DOWN
42
CONFIG
44
GOOD
REJ
D. WIDE
READ
WRITE
ALARM
50
END
STEP 0
STEP 1
STEP 2
STEP 3
STEP 4
STEP 5
STEP 6
STEP 7
STEP 8
STEP 9
STEP 10
STEP 11
STEP 12
STEP 13
STEP 14
STEP 15
STEP 16
STEP 17
STEP 18
STEP 19
STEP 20
STEP 21
STEP 22
STEP 23
STEP 24
STEP 25
STEP 26
STEP 27
STEP 28
STEP 29
STEP 30
STEP 31
0
12
11
13
200
30
32
22
28
26
38
24
32

Figure 3

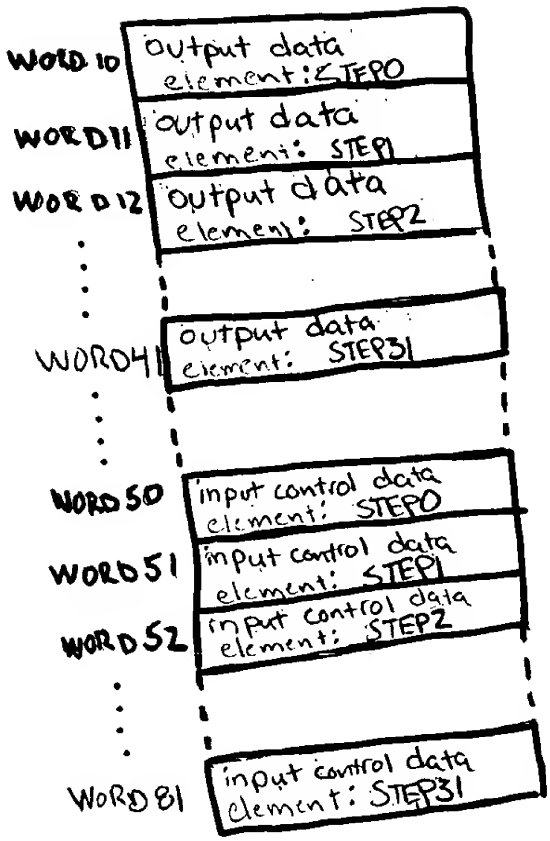


Figure 4

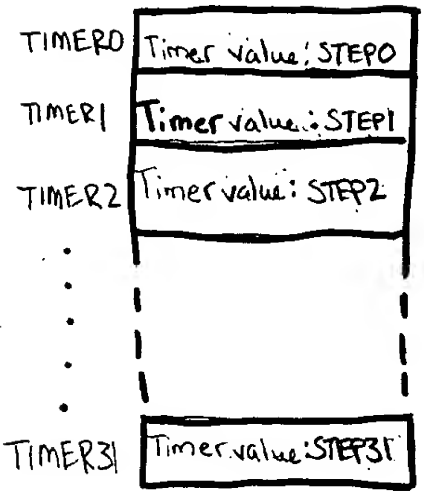
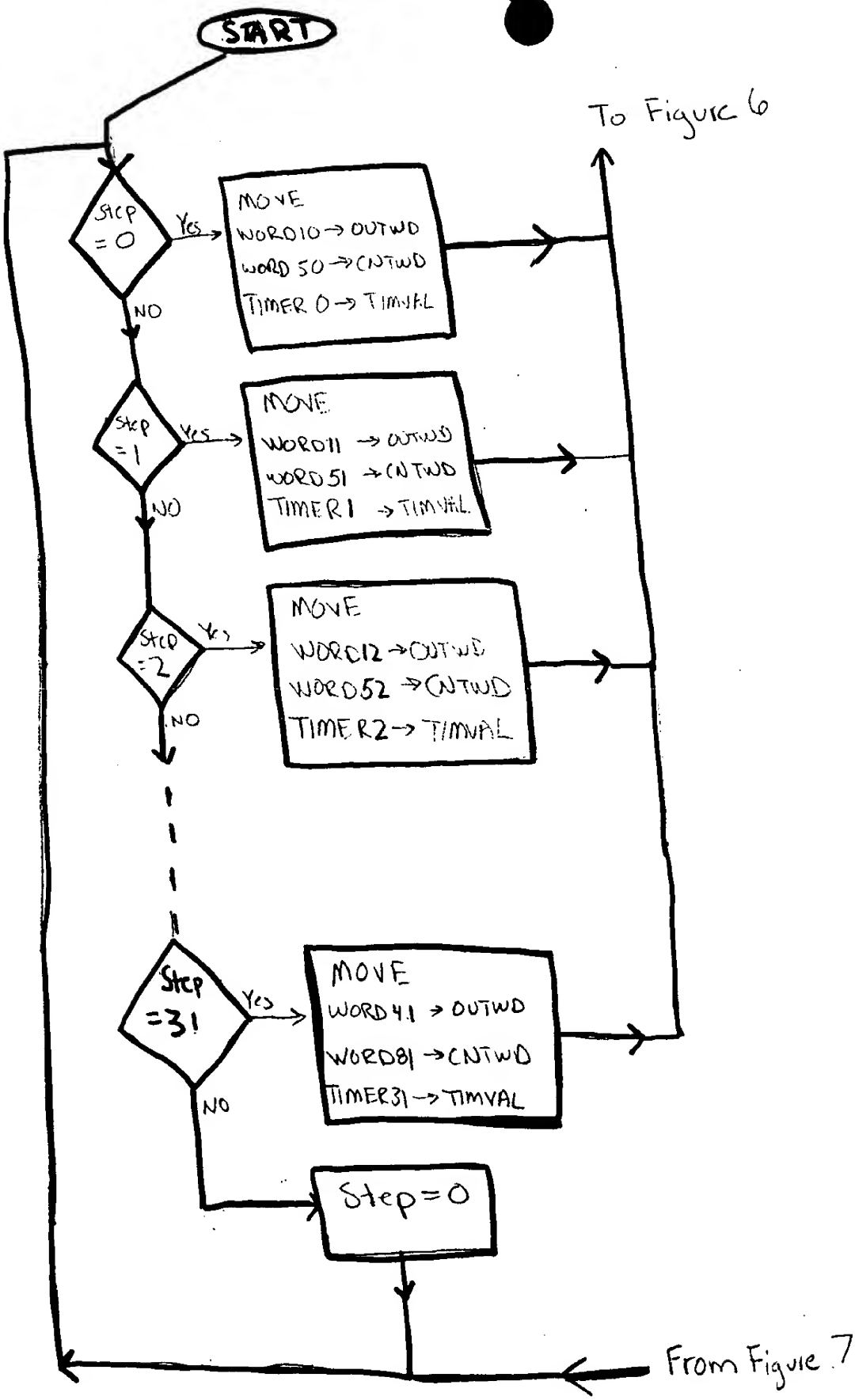


Figure 5


START
To Figure 6
STEP = 0
Yes
MOVE
WORD10 → OUTWD
WORD 50 → CNTWD
TIMER 0 → TIMVAL
NO
STEP = 1
Yes
MOVE
WORD11 → OUTWD
WORD 51 → CNTWD
TIMER 1 → TIMVAL
NO
STEP = 2
Yes
MOVE
WORD12 → OUTWD
WORD 52 → CNTWD
TIMER 2 → TIMVAL
NO
STEP = 31
Yes
MOVE
WORD 41 → OUTWD
WORD81 → CNTWD
TIMER31 → TIMVAL
NO
Step = 0
From Figure 7

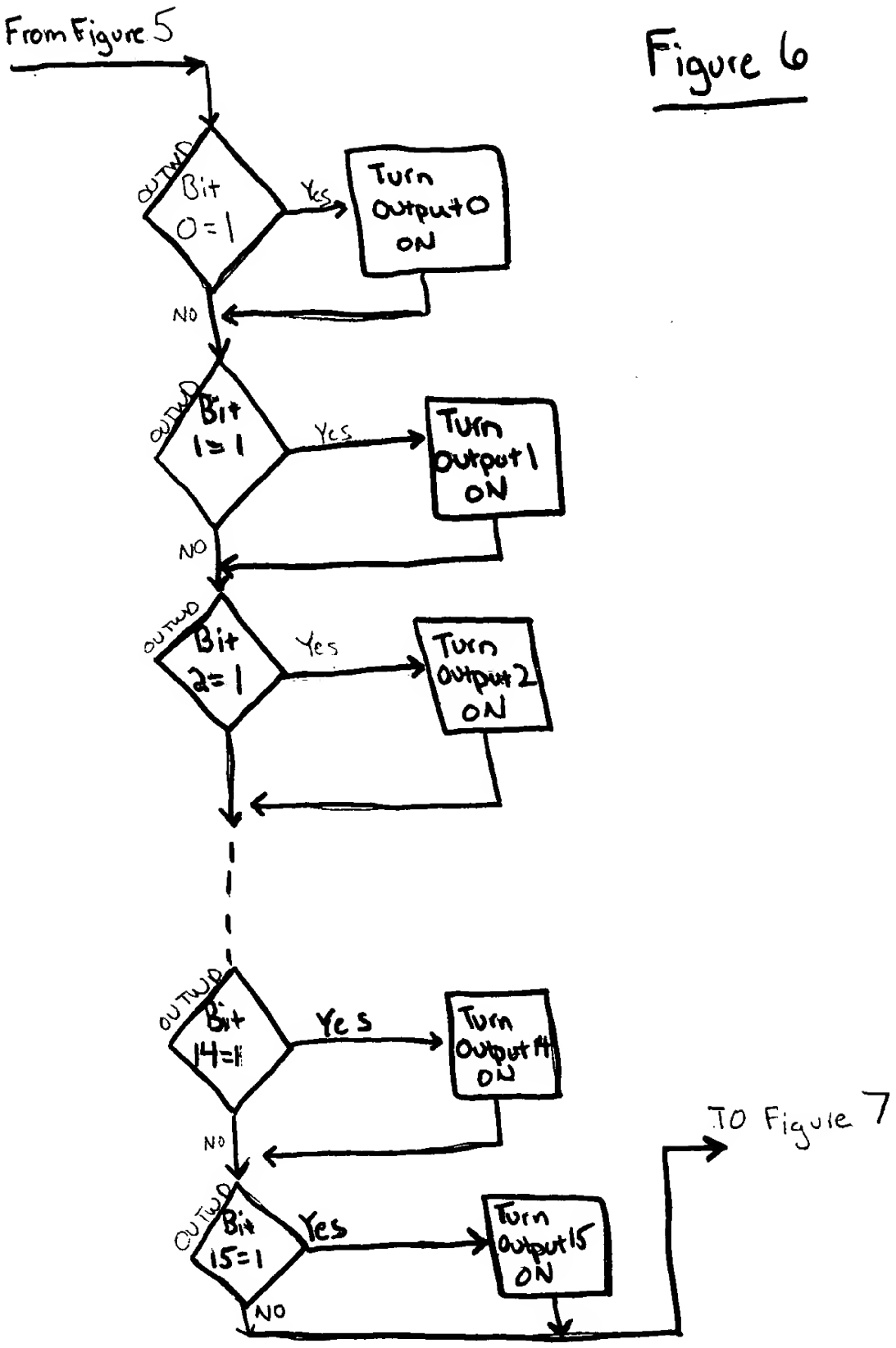
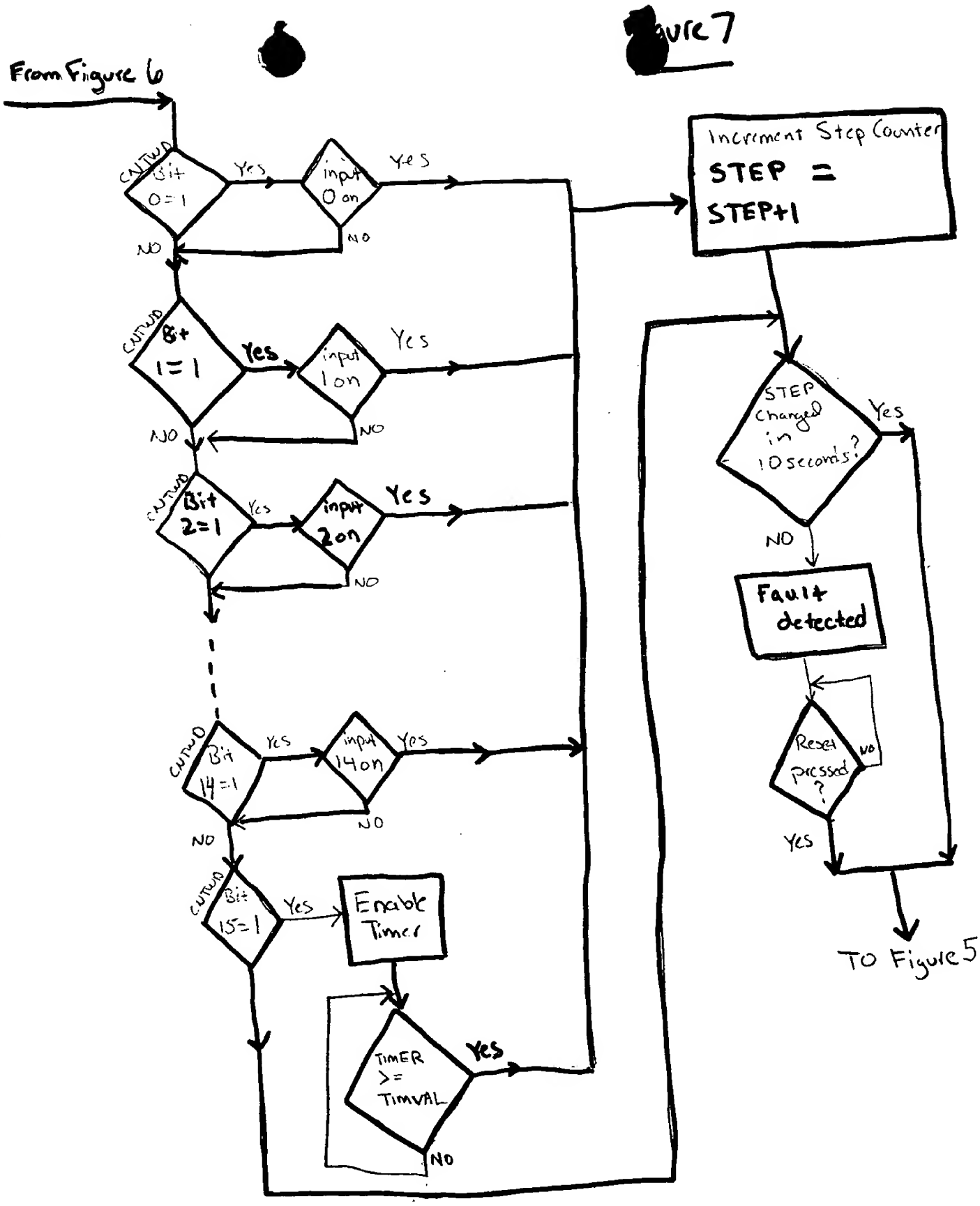

From Figure 5
OUTWD
Bit 0=1
Yes
Turn Output 0 ON
NO
OUTWD
Bit 1=1
Yes
Turn Output 1 ON
NO
OUTWD
Bit 2=1
Yes
Turn Output 2 ON
OUTWD
Bit 14=1
Yes
Turn Output 14 ON
NO
OUTWD
Bit 15=1
Yes
Turn Output 15 ON
NO
TO Figure 7

Figure 6


From Figure 6
Figure 7
OUTWD Bit 0=1
Yes
Input 0 on
Yes
NO
NO
OUTWD Bit 1=1
Yes
Input 1 on
Yes
NO
NO
OUTWD Bit 2=1
Yes
Input 2 on
Yes
NO
NO
OUTWD Bit 14=1
Yes
Input 14 on
Yes
NO
NO
OUTWD Bit 15=1
Yes
Enable Timer
TIMER >= TIMVAL
Yes
NO
Increment Step Counter
STEP = STEP+1
STEP changed in 10 seconds?
Yes
NO
Fault detected
Reset pressed ?
NO
Yes
TO Figure 5